

# ELECTRONICS FACILITIES IN CUBA

## ANNEX 1B

### CARRIER FACILITIES AND TOLL CIRCUITS OF THE CUBAN TELEPHONE COMPANY

CIA/RR EP60-73-S1B

November 1960

CENTRAL INTELLIGENCE AGENCY

OFFICE OF RESEARCH AND REPORTS

CONTENTS

Carrier Facilities as of 4 October 1960

Toll Circuit Layout (1957-60 Construction Program)

Aguila, Guanabo, Mantanzas, and Santa Clara . . . . .	1 of 7
Aguila, A. Arenas, Artemisa, and Guane . . . . .	2 of 7
Santa Clara and Santiago de Cuba . .	3 of 7
Alquizar, Habana, Guines, and Agramonte . . . . .	4 of 7
Batabano and Cienfuegos . . . . .	5 of 7
Jibacoa and Nuevitas . . . . .	6 of 7
Cacocum, Holguin, P. Padre, Alto Cedro, Antilla, Banes, Dos Caminos, Guantanamo, and Baracoa . . . . .	7 of 7

*For a diagram of the basic network, see Figure 1 of CIA/RR EP 60-73*

CARRIER TERMINALS				CARRIER REPEATERS		MISCELLANEOUS		EDICION. 5-20-57
SYMBOL	MFR	LINE FREQ. KILOCYCLES	TYPE	SYMBOL	MEANING	SYMBOL	DESCRIPTION	
	PANTANGLE	50-335	STACKABLE UP TO TEN SINGLE CHANNELS		FTR 3PI SINGLE CHANNEL		L.D. TELEPHONE	
	FTR	3.5-10	341 SINGLE CHANNEL		WE "C" 3 CHANNELS		PARTY LINE	
	FTR	3.6-12.4	342-1 " " "		FTR 981 3 CHANNELS		CUT IN STATION	
	FTR	13.6-22.9	342-2 " " "		LENKURT 32E 3 CHANNELS		PHYSICAL EQUIPPED WITH 75, 76, 77 or 93 A COIL	
	FTR	13.6-21.1	341 " " "		CTC 30J 12 CHANNELS		PHANTOM GROUP 5W 75, 76 or 93 COILS ON SIDE CIRCUIT NO OIL ON PHANTOM CIRCUIT	
	WE	4.15-10.15			LENKURT 45A 12 CHANNELS		PHANTOM GROUP 5W 75, 76 or 93 COILS ON SIDE CIRCUIT 75 or 93 COIL ON PHANTOM	
	FTR	6-30	381 3 CHANNEL		LENKURT 45BN 12 CHANNELS		75A REF COIL	
	WE	6-30	"C" 3 CHANNEL		WE 08 4 CHANNELS		VOICE REPEATER HYBRID TYPE SERIES 02 HYBRID TYPE	
	LENKURT	6-30	32E 3 CHANNEL		LENKURT 45CB 4 CHANNELS		PROGRAM AMPLIFIER	
	LENKURT	3.3-35	32E 4 CHANNEL		LENKURT 45CC 4 CHANNELS		COMPOSITE SET ON SIDE OCT	
							SUGAR MILL	
	CTC	36-140	30J 12 CHANNELS	LINE FILTERS			RADIO LINK	
	LENKURT	40-150	45A 12 CHANNEL THREE GROUPS OF FOUR CHANNELS		PANTANGLE LINE FILTER		OUTGOING DIAL TRUNK	
	LENKURT	40-264	45BN 24 CHANNELS IN SIX GROUPS OF FOUR CHANNELS		3KC FILTER			
	LENKURT	40-150	45A 12 CHANNEL BASE GROUP EQUIPMENT		4 KC. 902A FILTER			
	LENKURT	40-264	45BN 24 CHANNEL BASE GROUP EQUIPMENT		WE 121 5 KC FILTER			
					37C 30J HF FILTER			
					LENKURT HF FILTER ALSO TYPE O FILTER			
	WE	40-76	WE 08 4 CHANNEL		BRIDGE FILTER			
	LENKURT	40-76	45CB 4 CHANNEL		10 KC FILTER (FTR 904A)			
	LENKURT	80-116	45CC 4 CHANNEL					
					08/45 CB. LINE FILTER			
					45 CC. LINE FILTER			
	LENKURT	THIS SYMBOL INDICATES THAT THE CHANNELS ARE DROPPED TO VOICE FREQUENCY WHEN ASSOCIATED WITH 45 TYPE EQUIPMENT.						
			V.F. TELEGRAPH TERMINAL. NUMBER INDICATES NO. CHANNEL.					

**CUBAN TELEPHONE COMPANY**  
DEPARTAMENTO DE INGENIERIA

**TOLL CIRCUIT LAYOUT MAPS**

**SYMBOLS**

DISEÑADO: J. S. Paulina  
 DIBUJADO: J. S. Paulina  
 REVISADO: J. S. Paulina  
 FECHA: 5-20-57

**310.022**

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CARRIER FACILITIES AS OF OCTOBER 4/1960

FROM CENTRAL OFFICE	TO CENTRAL OFFICE	ONE CHANNEL CARRIER		THREE CHANNEL CARRIER		FOUR CHANNEL CARRIER		SEVEN CHANNEL CARRIER		TWELVE CHANNEL CARRIER			
		TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY		
1) HAVANA	CARDENAS			Mix Gen-25H	3								
2) "	MOLGUIN			" " "	3								
3) "	CAMAGUEY			R.E.P. "C"	3					Mix Gen-212 F	6		
4) "	SAGUAGRANDE									" " "	4		
5) "	CIEGO AVILA			R.E.P. "C"	3					" " "	4		
6) "	SANTA CLARA									" " "	12		
7) "	STGO. CUBA									" " "	10		
8) "	VARADERO									" " "	9		
9) "	CARDENAS			FTR-9B1	3								
10) "	V. TUNAS			R.E.P. "C"	3								
11) "	STO. VEGAS									Mix-Gen-212M	48		
12) HAVANA	KEY WEST							"K"	7	"L"	24		
13) COTORRO	CAMAGUEY			FTR-9B1	3								
"	CIEINFUEGOS			" "	3								
"	SANTA CLARA			" "	3								
"	VARADERO			" "	1					"J"	12		
"	STGO. DECUBA												
14) STO. VEGAS	PINAR DEL RIO					LYNCH-B500	4						
15) PINAR DEL RIO	ARTEMISA	FM PANH.	2										
16) "	STGO. VEGAS	-	-	FTR 9B1	3								
17) "	SAN LUIS (PR)	LYNCH B28	1										
18) "	S.J. MARTINEZ	LYNCH B28	1										
19) CAMAGUEY	CIEGO AVILA	W.ELECTRIC H-1	1							Mix Gen 212 F	1		
"	" "	FTR 9H2	1										
20) "	STA. LUCIA	W.ELECTRIC H-1	1										
21) "	ESMERALDA	FTR 9H1	1										
"	" "	FTR 9H2	1										
22) "	STA. CRUZ	FTR 9H1	1										
"	" "	FTR 9H2	1										
23) "	FLORIDA	FM PANH.	10										
24) "	NUEVITAS	FM PANH.	16										
25) "	STA. CLARA	-	-							Mix Gen 212 F	2		
26) STGO. CUBA	BAYAMO	W.ELECTRIC H-1	1							Mix Gen 212 F	8		
27) "	GUANTANAMO	FTR 9F1	1	FTR 9B1	3	LYNCH B60J	8			-	-		
"	"	FTR 9A1	1							-	-		
28) "	MAYARI	FTR 9F1	1							Mix Gen 212 F	6		

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		TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY		
29) STGO. CUBA	PALMA SONIANO	FTR 9A1	2										
" "	" "	FTR 9H2	1										
30) " "	SAN LUIS (O)	WEI H-1	1										
" "	" "	FTR 9F1	1										
31) " "	V. TUNAS	FTR 9F1	1										
32) " "	CAMAGUEY	WEI H-1	1	FTR 9B1	3								
33) " "	HOLGUIN	-	-	FTR 9B1	3								
34) " "	MANZANILLO	-	-	FTR 9B1	3					Mix Gen. Z12 F	9		
35) " "	PALMA SONIANO	FM PAN H.	4							Mix Gen. Z12 F	4		
36) " "	GIBARA	WEI H-1	1										
37) " "	ANTILLA	-	-										
38) " "	STA. CLARA									Mix Gen. Z12 F	6		
										Mix Gen. Z12 F	2		
39) STA. C. AMA	SAGUA GRANDE	FTR 9A1	1							Mix Gen. Z12 F	5		
40) " "	ST. SPIRITOS	FTR 9A1	2										
41) " "	TRINIDAD	WEI H-1	1										
" "	" "	FTR 9H2	1										
42) " "	CAIBARIEN	FM PAN H.	6										
43) " "	PLACETAS	FM PAN H.	6										
44) " "	CAMAGUEY	FTR 9F1	1										
45) " "	CIENTRUECOS	FTR 9H2	1							Mix Gen. Z12 F	6		
46) MATANZAS	JOVELLANOS	FTR 9A1	1										
47) " "	" "	FM PAN H.	1										
48) CIENTRUECOS	CROCES	FM PAN H.	1										
49) " "	RANCHUEL	FM PAN H.	1										
50) " "	MANCABAGUA	FM PAN H.	2										
51) " "	STO. DOMINGO	FTR 9H2	2										
71) HOLGUIN	PUERTO PADRE	FTR 9H2	1										
72) CIEGO AVILA	MORON	FTR 9A1	2										
" "	" "	FM PAN H.	12										
73) CARPENAS	COLON	FTR 9H2	1										
74) " "	VARADERO	FM PAN H.	4										
75) STI SPIRITOS	PLACETAS	FM PAN H.	2										
76) GUANTANAMO	BARACOA	FTR 9A1	1										
" "	" "	FM PAN H.											
77) " "	CAIMANERA	FTR 9A1											
CONT. PAGE 3													

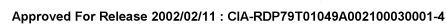
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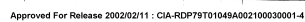
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		TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY	TYPE	QUANTITY		
78) ARTEMISA	STGO. VEGAS	FTR-9A1	1										
79) "	SANCRISTOBAL	FM PAN H	2										
80) BAYAMO	MANZANILLO	FTR 9H2	1							MIX 9 Gen ZIF	2		
81) "	PALMA SORIANO	FTR 9H2	1										
82) CAIBARIEN	PLACETAS	LYNCH B28	3										
83) "	REMEDIOS	FM PAN H	2										
84) "	YAGUAJAY	LYNCH B28	2										
85) COLON	AGUADA P.	FTR-9H2	1										
86) "	COTORRO	W. Electric H-1	1										
87) PLACETAS	CAMAJUANI	FM PAN H.	3										
88) "	FOMENTO	FM PAN H.	2										
89) "	TRINIDAD	FM PAN H.	1										
90) "	YAGUAJAY	FM PAN H.	3										
91) S. ANTONIO B.	VEREDA NUEVA	FM PAN H.	6										
92) A. ARENAS	GUANAJAY	FTR-9H2	1										
93) COTORRO	SAN JOSE	FM PAN H.	3										
94) GUANABO	AGUILA	FM PAN H.	10										
95) SAN CRISTOBAL	LOS PALACIOS	FM PAN H.	1										
96) IGUARA	YAGUAJAY	FM PAN H	1										
97) MAYAKI	S. TANAMO	LYNCH B28	2										
98) TRINIDAD	FOMENTO	FM PAN H.	1										
TOTALS FTR CHANNELS			35		33		-		-		-		
TOTALS W. ELECTRIC CHANNELS			8		-		-		-		-		
TOTALS LYNCH CHANNELS			9		-		12		-		-		
TOTALS FM PANHANDLE CH.			91		-		-		-		-		
TOTALS R. ENG. PRODUCTS CH.			-		9		-		-		-		
TOTALS OTHERS CHANNELS			-		-		-		-		36		
TOTALS MIX 9 GENES			-		-		-		-		144		
GRAND TOTAL CHANNELS			143		48		12		7		180		F.E.

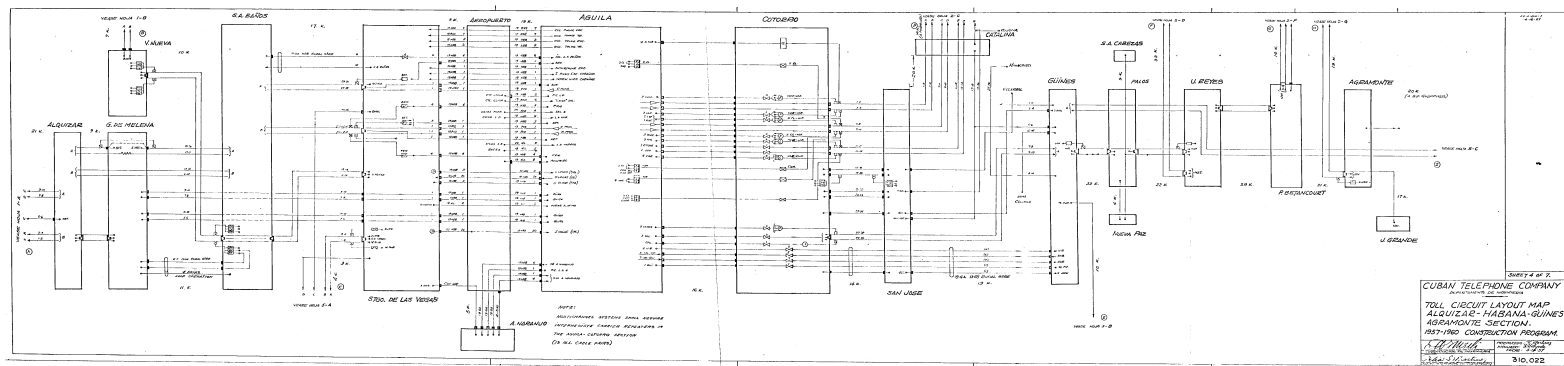
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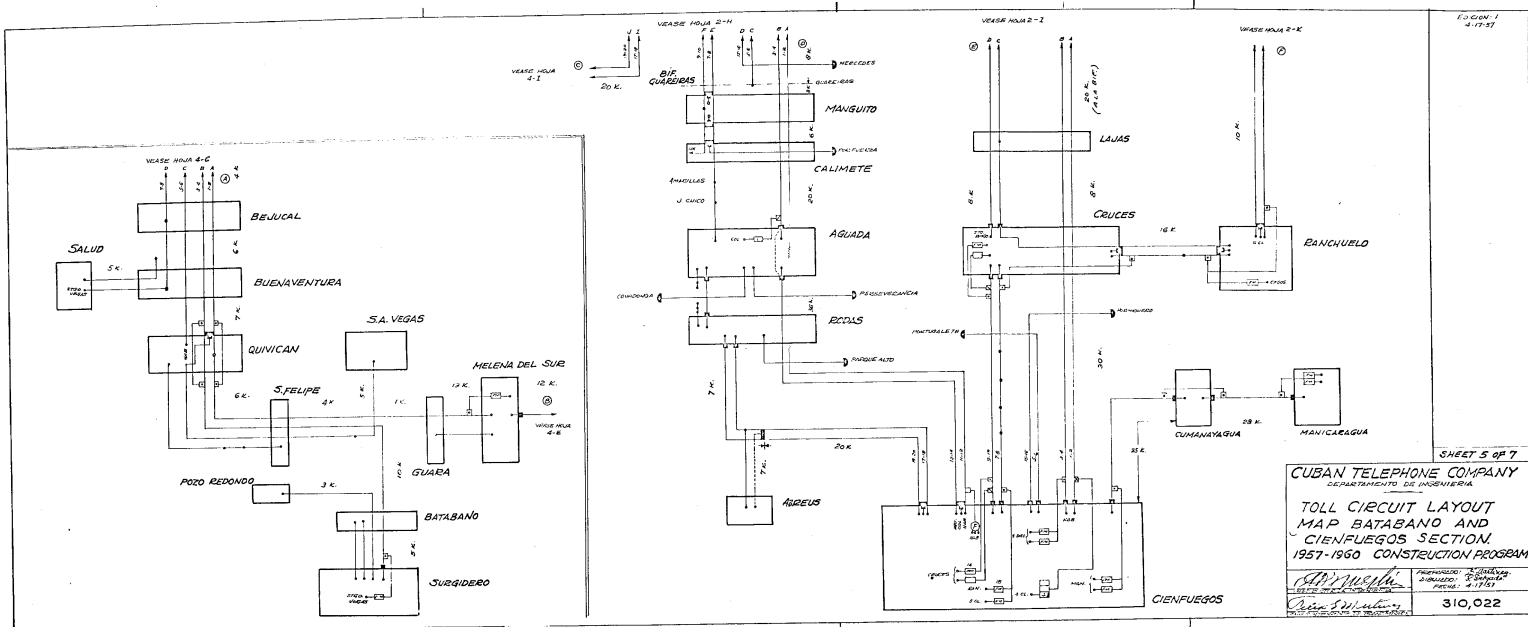


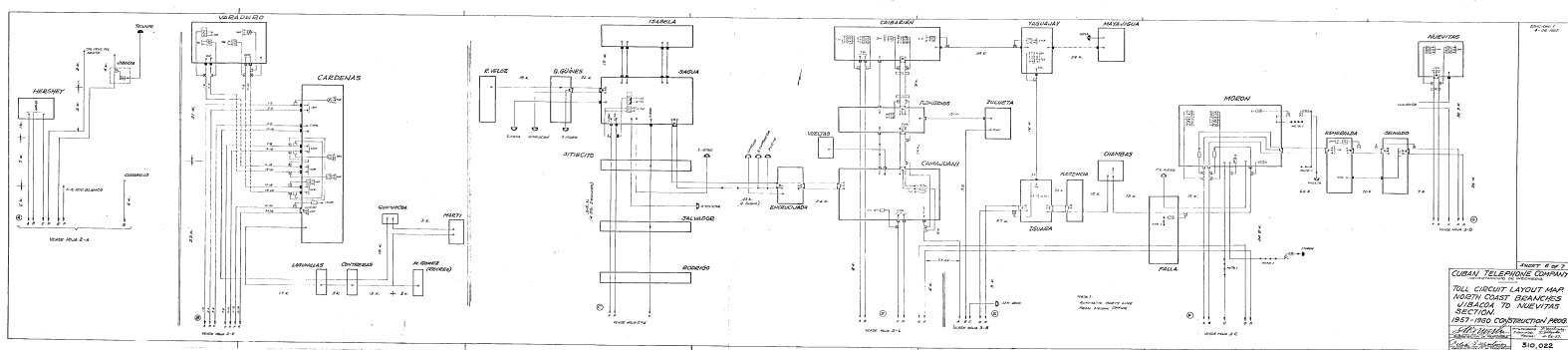


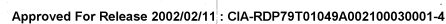












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